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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,470	09/10/2003	Kouta Fukui	FSF-031461	2212
37398	7590	12/28/2004		
TAIYO CORPORATION 2111 JEFFERSON DAVIS HIGHWAY #412, NORTH ARLINGTON, VA 22202			EXAMINER CHEA, THORL	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Applicati n N .

10/658,470

Applicant(s)

FUKUI, KOUTA 

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>09102003</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of the term “each” in claims 1, 5 in association with “of organic compound” appears to be either unclear or awkward since there is no organic compounds are listed therewith. The term “each” usually used to recite the compound previously cited, and in the absence of provided previously cited organic compounds, the term “each” renders the claims unclear. Also, it is unclear with respect to the scope of protection sought for the “organic compounds”, i.e. the organic compounds limit to the non-photosensitive organic silver salt or otherwise. The term “exposed” in claim 5 is indefinite as it is unclear with respect to the environment at in which the photothermographic material is exposed to. Claim 5 is also unclear with respect language “using” a thermal developing device since the term “use” fails to clearly define as how the device is used in the process.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claim 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukui et al (US 2002/0102502). See Fukui et al page 35, [0385] to [0396] wherein the photothermographic material contains an organic compound an amount with the scope of  $0.05 \text{ g/m}^2$  and these compound are the compound within the organic compound within the meaning provided in the present specification disclosure. It would have expected therefore the volatilization remaining ratio within the scope of the claimed invention. The invention therefore lacks novelty.

5. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Kudo et al (US Patent No. 6, 475,710). See column 2, formula (I), column 3, formula (3), column 16, formula 3-1 to 3-8; columns 9-14, formula 2-1 to 2-41; Examples 1-3 in columns 67-81, and the amount of organic compound such as pthalazine in column 69, lines 1-10, column 75, lines 25-33. The teaching of Kudo et al meets the limitation of the invention as claimed. Therefore, the invention as claimed is anticipated by Kudo et al. The volatilization remaining ratio would be inherent to the material of Kudo et al because of the similarity of the composition.

6. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Asanuma et al (US Patent No. 6,146,822). See columns 87-96, claims 1-17; Examples 1-14 in column 53-87, and the amount of organic compound used therein. Such as column 59, lines 20-30; column 61, Table 2 columns 65-66, Table 3.; column 85-86 Table 8. The

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amount thereof is higher than 0.05 g/m<sup>2</sup>. Accordingly, the claimed invention lacks novelty.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5, 9 rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Fukui et al (US 2002/0102502) and Biegler et al (US Patent No. 5,600,396). Fukui et al discloses the material of the claimed method such as shown in paragraph 4 above, but fails the thermal developing device comprising a filter to collection volatilized substance claimed in the present claimed invention, but the device as claimed has been known in Biegler et al. See abstract, Fig 2, column 3, lines 1-12. it would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use device taught in Biegler to trap the odor particle in the process for forming an image using a photothermographic material taught in Fukui et al, and thereby provide an invention as claimed. See also Fukui et al on page 23, first column, [0237] wherein the developing time is preferably 10 to 15 seconds.

9. Claims 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Fukui et al (US 2002/0102502) and Biegler et al (US Patent No. 5,600,396). as applied to claim 5 above, and further in view of either Kudo et al (US Patent 6,475,710) or Asanuma et al (US Patent No. 6,146,822). Kubo et al and Asanuma et al discloses the use compound of formula (I) or (II) as to improve storage stability and to enhance the sensitivity and

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image quality of the photothermographic material. See Asanuma et al in columns 87-98, claims 1-17 and Kudo et al in column 81, claim 1. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the compound taught in either Kudo et al or Asanuma et al in the process obtained by the combination of Fukui et al and Biegler et al with an expectation of achieving a process that provide a photothermographic material with improved image storage stability and to enhance the sensitivity and image quality of the photothermographic material, and thereby provide a process as claimed.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

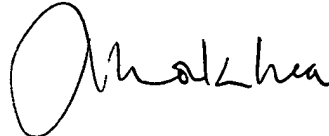
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tch *ten*  
December 20, 2004

Thorl Chea  
Primary Examiner  
Art Unit 1752

A handwritten signature in black ink, appearing to read "Thorl Chea", written in a cursive style.